

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-9 are pending in the present application, Claims 1 and 7-9 having been amended. Support for the amendments to Claims 1 and 7-9 is found, for example, in Fig. 4. Applicant respectfully submits that no new matter is added.

In the outstanding Office Action, Claim 1 was rejected under 35 U.S.C. §102(a) as anticipated by Applicant's Admitted Art (hereinafter "APA"); Claim 1 was rejected under 35 U.S.C. §102(a) as anticipated by Wright et al. (U.S. Patent No. 6,411,410, hereinafter Wright); Claims 2-4 were rejected under 35 U.S.C. §103(a) as unpatentable over Applicant's Admitted Art in view Kunikane et al. (U.S. Patent No. 5,479,547, hereinafter Kunikane); Claims 2-4 were rejected under 35 U.S.C. §103(a) as unpatentable over Wright in view Kunikane; Claim 5 was rejected under 35 U.S.C. §103(a) as unpatentable over Wright in view of Rivoallan (U.S. Patent No. 6,130,974); Claim 5 was rejected under 35 U.S.C. §103(a) as unpatentable over Applicant's Admitted Art in view of Rivoallan; Claim 6 was rejected under 35 U.S.C. §103(a) as unpatentable over Wright in view Kunikane, and further in view of Ellison et al. (U.S. Patent No. 6,556,757, hereinafter Ellison); Claim 6 was rejected under 35 U.S.C. §103(a) as unpatentable over Applicant's Admitted Art in view Kunikane, and further in view of Ellison; Claims 7 and 8 was rejected under 35 U.S.C. §103(a) as unpatentable over Kunikane in view of Wright, and further in view of Feldman et al. (U.S. Patent No. 6,577,414, hereinafter Feldman); and Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Kunikane in view of Wright, and further in view of Schmack et al. (U.S. Patent No. 4,481,621, hereinafter Schmack).

With respect to the rejection of Claim 1 as anticipated by APA, Applicant respectfully traverses this ground of rejection. Claim 1 recites, *inter alia*, "the wavelength division

multiplexer/demultiplexer outputs wavelength signals other than the eliminated particular wavelength and prevents further downstream transmission of the eliminated particular wavelength.” The outstanding Office Action takes the position that this feature of Claim 1 is disclosed in the APA of Fig. 1 of the specification.

The APA shows WDM 131b connected to terminator 135b. In the system shown in the APA, WDM 131b demultiplexes a signal received from the central office unit 101 into a video signal and other signals. The other signals include telephone signals, for example. Subscriber unit 105b does not include a video receiver, and does not require the video signal. Thus, subscriber unit 105b includes a terminator 135b. WDM 131b outputs, in a downstream direction, the video signal to the terminator 135b. WDM 131b does not eliminate any wavelengths.

Thus, the APA does not disclose or suggest the claimed “the wavelength division multiplexer/demultiplexer outputs wavelength signals other than the eliminated particular wavelength and prevents further downstream transmission of the eliminated particular wavelength.”

With respect to the rejection of Claim 1 as anticipated by Wright, Applicant respectfully submits that the amendment to Claim 1 overcomes this ground of rejection. Amended Claim 1 recites, *inter alia*, “wherein said wavelength multiplexer/demultiplexer includes a first optical waveguide, a second optical waveguide, and a filter positioned such that the first optical waveguide and the second optical waveguide form a junction at the filter.”

Figs. 1 and 2 of Wright show a communications network employing a passive optical network (PON). The passive optical network includes optical network unit (ONU) 14. Fig. 7 shows a block diagram of ONU 14. The ONU includes a tuneable filter 42 connected to the downstream PON for receiving the wavelength-division multiplexed optical signals S1 to SN,

an optical receiver 44, a wavelength control extraction unit (WCEU) 46, and a transmitter 48 connected to the upstream PON.<sup>1</sup>

In Wright, the wavelength division multiplexed optical signals S1 to SN produced by the optical line termination unit (OLT) 12 are received by the tunable filter 42 which, based on a control signal CS applied thereto by the WCEU, selects the optical signal S<sub>sel</sub> having the specified wavelength and passes it to the optical receiver 44. Optical receiver 44 processes the selected optical signal to extract therefrom the data carried by the signal.<sup>2</sup>

However, Wright does not disclose or suggest that ONU 14 includes a wavelength multiplexer/demultiplexer that includes “a first optical waveguide, a second optical waveguide, and a filter positioned such that the first optical waveguide and the second optical waveguide form a junction at the filter.”

Furthermore, the APA does not cure the above-noted deficiency in Wright. The WDM used in the system disclosed in the APA is a spatial optical filter. A spatial optical filter does not include “a first optical waveguide, a second optical waveguide, and a filter positioned such that the first optical waveguide and the second optical waveguide form a junction at the filter.”

Furthermore, Kunikane does not cure the above-noted deficiency in Wright or the APA. Fig. 2 of Kunikane shows a waveguide optical multiplexer and demultiplexer module. As shown in Fig. 2, the waveguide optical multiplexer and demultiplexer module includes waveguides 23, which form an optical coupler 22. However, optical coupler 22 is not formed at the filter 26.

Thus, Kunikane does not disclose or suggest the claimed “wherein said wavelength multiplexer/demultiplexer includes a first optical waveguide, a second optical waveguide, and

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<sup>1</sup> Wright, col. 9, lines 53-60.

<sup>2</sup> Wright, col. 9, line 61, to col. 10, line 2.

a filter positioned such that the first optical waveguide and the second optical waveguide form a junction at the filter."

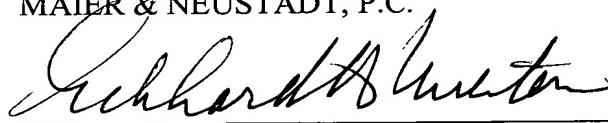
Furthermore, Rivoallan, Ellison, Feldman, and Schmack do not cure the above-noted deficiencies in Applicant's Admitted Art and Wright.

In view of the above-noted distinctions, Applicant respectfully submits that Claim 1 (and Claims 2-6 dependent thereon) patentably distinguish over Wright, APA, Kunikane, Rivoallan, Ellison, Feldman, and Schmack, taken alone or in proper combination. Claims 7-9 recite elements similar to those of Claim 1. Thus, Applicant respectfully submits that Claims 7-9 patentably distinguish over Wright, APA, Kunikane, Rivoallan, Ellison, Feldman, and Schmack, taken alone or in proper combination, for at least the reasons provided for Claim 1.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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